Drug Abuse Patterns and Trends in the San Francisco Bay Area—Update: June 2014

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ABSTRACT

In San Francisco, increases in heroin consequence indicators (treatment admissions and Drug Enforcement Administration [DEA] seizure reports) that followed a decline in previous years was a key finding for the area, with other opiates showing similar trends. A second key finding was the continuing increase in methamphetamine indicators, while those for cocaine continued to decline. According to the California Department of Justice Prescription Drug Monitoring Program, hydrocodone continued to be the most frequently prescribed opioid across the 5 bay area counties, although the volume of prescriptions declined from 1.8 to 1.6 million between 2011 and 2013. There was a corresponding decreased frequency in reports of hydrocodone from drug items seized and analyzed by the DEA's National Forensic Laboratory Information System (NFLIS), between 2012 and 2013. Methamphetamine ranked first and marijuana ranked second among items seized and analyzed by NFLIS, followed by cocaine (third) and heroin (fourth); other opiates/opioids, including hydrocodone, oxycodone, methadone, and morphine, ranked fifth through eighth. When these four other opiate/opioid drugs were combined, they accounted for 8.3 percent of the identified reports. MDMA (3,4-methylenedioxymethamphetamine) reports ranked ninth (1.0 percent) among seized items analyzed by NFLIS; this was a decline from 2011 when they ranked seventh (2.3 percent). Although slightly lower than in the previous year, alcohol admissions continued to dominate treatment admissions, ranking as the most frequent primary drug reported among San Francisco treatment admissions, particularly among males older than 35. Heroin increased slightly to surpass cocaine and rank as the second primary drug at admission, followed in order by cocaine, methamphetamine, and marijuana; both methamphetamine and marijuana showed slight increases from the prior year, while cocaine continued a downward trend that began in fiscal year 2008–2009. Individuals trained to administer naloxone (n=791), prescription naloxone refills (n=836), and reported overdose reversals using naloxone (n=274) increased considerably over the past several years, reflecting increased interest in and use of naloxone to reverse opiate overdoses. AIDS (acquired immunodeficiency syndrome) incidence and mortality have dropped to baseline levels, with approximately 18 percent of cases including injection drug use as a transmission factor.

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INTRODUCTION

Area Description

The San Francisco and northern California area that is the focus of this report includes all five of the bay area counties, but the report focuses primarily on the city and county of San Francisco. San Francisco ranks as the 4th largest California city and ranks 14th largest in the United States, with an estimated population of 837,442 as of July 1, 2013 (U.S. Census, 2014). The population size of the city has grown by more than 32,000 residents since 2010.

In general, California's economy has improved dramatically over the past 3 years, with California Governor Jerry Brown announcing a substantial budget surplus in May 2014. San Francisco's current "boom" economy also resulted in positive local budget projections and is largely driven by the growth in technology business in the city and by technology workers who reside there but commute to work in areas south of San Francisco. The corresponding growth in the real estate market has resulted in nonprofit organizations and poor residents losing long-term leases, forcing some to leave the city and others to relocate in search of affordable rent. The gap between rich and poor has increased considerably, with the growth in the disparity between wealthy and poor San Francisco household incomes ranked number one in the United States according to a Brookings Institution study reported in a recent *San Francisco Chronicle* article (March 2, 2014).

Data Sources

The sources of data for the drug abuse indicators cited in this report are described below:

- **Treatment admissions data** for San Francisco County were provided by Community Behavioral Health Services division of the San Francisco Department of Public Health (SFDPH) for fiscal years (FYs) 2006–2007 through 2012–2013. Admissions are clients actually admitted to treatment during a year. Treatment episodes include clients admitted in prior years who are still receiving services in a particular year (e.g., methadone maintenance clients).

- **Nonfatal overdose episode data** were obtained from the San Francisco Drug Overdose Prevention Education (DOPE) Project, a program of the Harm Reduction Coalition, 2014.

- **Population data** were obtained from the U.S. Census Bureau, Annual Estimates of the Resident Population for Incorporated Places of 50,000 or More, Ranked by July 1, 2013, Population: April 1, 2010, to July 1, 2013 - United States -- Places Over 50,000 Population 2013 Population Estimates. Accessed June 16, 2004, at *http://factfinder2.census.gov/bkmk/table/1.0/en/PEP/2013/PEPANNRSIP.US12A*.

- **Drug seizure data** were provided by the National Forensic Laboratory Information System (NFLIS), Drug Enforcement Administration (DEA). Data were retrieved on Identified Drugs of Total Analyzed Drug Reports, San Francisco, 2013, NFLIS, DEA, May 13, 2014, for the five bay area counties for 2011–2013. NFLIS methodology allows for the accounting of up to three drugs per item submitted for analysis. The data presented are a combined count including primary, secondary, and tertiary reports for each drug.

- **Acquired immunodeficiency syndrome (AIDS) surveillance and human immunodeficiency virus (HIV) data** were provided by the SFDPH), *HIV Epidemiology Section, Quarterly HIV/AIDS Surveillance Report, HIV/AIDS Cases Reported Through December 2013,* accessed at: *http://www.sfdph.org/dph/files/reports/default.asp*.

- **Data for the top prescribed drugs** for the five bay area counties for 2011–2013 were provided by the California Department of Justice, Law Enforcement Support Program, Bureau of Criminal Identification and Investigative Services, from the Controlled Substance Utilization Review and Evaluation System (CURES), California Prescription Drug Monitoring Program (*http://oag.ca.gov/cures-pdmp*) accessed May 5, 2014.

- **San Francisco Area Economic Information** came from the following source: Knight, Heather (2014, March 2). In growth of wealth gap, we're No. 1. *San Francisco Chronicle*.

Data Limitations

Drug treatment data, HIV surveillance data, and DOPE data are reported only for the city and county of San Francisco. NFLIS and CURES data are reported for the five bay area counties.

Overview of Findings

Heroin indicators have reversed trends from low points reported in 2011 and show growth in treatment admissions, treatment episode census, and drug reports among items seized and analyzed by DEA NFLIS laboratories. This trend is paralleled by corresponding increases in treatment episodes for various prescription opiates/opioids. Opiate, sedative hypnotic, and stimulant pharmaceuticals continued to be readily available through a large number of prescriptions throughout the five bay area counties (exhibit 1), although the volume for the most frequently prescribed medication, hydrocodone, has declined since 2011. Drug reports from items seized and analyzed by the DEA's NFLIS for opiate, sedative hypnotic, and stimulant pharmaceutical drugs appeared relatively stable, with reduced reports for hydrocodone. In reviewing the top 10 drugs identified in 2013 among items analyzed by NFLIS laboratories, when combined, these drugs accounted for 9.1 percent of the total, with 8.3 percent of this amount due to opiates/opioids (exhibit 2). The opiate reversal medication, naloxone, was provided to increasing numbers of individuals through education and training efforts in San Francisco, and reports of overdose reversals and medication refill requests also increased, particularly over the past 2 years (exhibit 3).

Methamphetamine indicators continued to rise as cocaine indicators declined. Among items seized and analyzed by NFLIS laboratories, reports identified as methamphetamine ranked first, increasing from 33.5 percent in 2012 to 39.0 percent in 2013, while cocaine ranked third and showed a decrease from 16.7 to 14.3 percent over the same time period. Treatment admissions for methamphetamine (*n*=1,015 in FY 2009–2010 and *n*=1,380 in FY 2012–2013) (exhibit 4) and individuals receiving treatment (exhibit 5) for methamphetamine in San Francisco continued to rise, while treatment admissions for cocaine, which still outranked methamphetamine on these indicators, continued to decrease (from *n*=3,364 in FY 2008–2009 to *n*=1,510 in FY 2012–2013).

In San Francisco, alcohol continued to dominate treatment admissions, ranking as the most frequent primary drug in treatment admissions (*n*=2,531) and second among clients receiving treatment during FY 2012–2013 (*n*=2,815), although these numbers decreased slightly from the previous fiscal

year. Heroin admissions increased from 1,798 to 1,925 between FY 2011–2012 and FY 2012–2013, but they ranked second, while heroin retained the top rank as the primary drug among those receiving treatment services in San Francisco (*n*=3,479) in FY 2012–2013. Cocaine admissions continued to decline and fell to the third ranked primary drug among admissions, but cocaine rose slightly among those enrolled in service episodes between FY 2011–2012 and FY 2012–2013 (*n*=1,620 versus *n*=1,735). Methamphetamine admissions increased for the third year in a row and ranked fourth as the primary drug at admission in FY 2012–2013 (*n*=1,380), approaching cocaine admission rates. Admissions for marijuana as the primary drug rose from 492 in FY 2011–2012 to 594 in FY 2012–2013. The census of those receiving treatment for methamphetamine was 1,154 during FY 2012–2013 (ranked fourth), followed by marijuana (*n*=668) and other prescription drugs (*n*=424).

AIDS incidence and mortality have dropped to rates similar to those in the early years of the epidemic. Approximately 18 percent of cases include injection drug use as a transmission factor (exhibit 6).

DRUG ABUSE TRENDS AND EMERGING PATTERNS

Alcohol

Alcohol remained the top primary drug among admissions for substance abuse treatment in San Francisco. Alcohol was the primary drug for more males (*n*=2,126) than females (*n*=678) (exhibit 7), and it was reported for more adults age 45–60 (*n*=1,264) than for 25–44-years-olds (*n*=1,100), clients age 60 and older (*n*=273), those age 19–24 (*n*=91), and youth age 16–18 (*n*=59) and 13–15 (*n*=26) (exhibit 8). Alcohol was the primary drug at admission reported by Latinos, Asians, Native Americans, and multiethnic groups, and it ranked second among Whites and third among African-Americans (exhibit 9).

Cocaine

Cocaine ranked third among reports from drug items seized and analyzed by NFLIS laboratories in 2013, accounting for 14.3 percent of total reports among drug items analyzed in the San Francisco Bay area (Metropolitan Statistical Area [MSA]) (exhibit 2). The proportion and rank were lower than those reported for the United States overall (15.4 percent, second in rank), and they were lower than the proportion of total cocaine reports in the San Francisco Bay area for 2012 (16.7 percent). Cocaine was the third most frequently reported primary drug among individuals seeking admission to substance abuse treatment in San Francisco. Cocaine was the most frequently reported primary drug reported among African-Americans in San Francisco (exhibit 9).

Methamphetamine

Methamphetamine remained the most frequently identified drug report among items seized and analyzed by NFLIS laboratories in 2013, accounting for 39.0 percent of total reports (exhibit 2). This rank is consistent with the prior year, and the proportion is an increase from 2012 (33.5 percent). Methamphetamine was more commonly identified among drug reports in the San Francisco area than in the United States, where methamphetamine ranked third at 14.6 percent. Methamphetamine was identified as the primary drug at admission for 1,380 admissions in San Francisco

(*n*=1,380) (exhibit 4), while there was a census of 1,154 individuals enrolled in treatment episodes for methamphetamine (exhibit 5).

Marijuana

While marijuana was the top drug identified in reports among items seized and analyzed by NFLIS laboratories in the United States in 2013 (at 31.4 percent), it ranked second in the San Francisco Bay area (representing 18.5 percent) (exhibit 2). Among primary drugs identified by those seeking treatment, marijuana ranked fifth in FY 2012–2013 (*n*=594). More youth age 5–18 (*n*=298) listed marijuana as a primary drug than did other groups: 100 were 19–24-year-olds, 200 were 25–44-year-olds, 60 were age 45–60, and 8 were older than 60.

Heroin

Data indicators for heroin showed increases in treatment admissions, treatment episodes, and in reports among items seized and analyzed by NFLIS laboratories. A majority of clients in treatment for heroin were male (exhibit 7), and heroin was the primary drug for individuals ages 19–24, 25–44, 45–60, and 60 and older (exhibit 8). It was also the primary drug among Caucasians (exhibit 9). Heroin ranked fourth among reports from drug items seized and analyzed by NFLIS laboratories in both San Francisco and in the United States, with the bay area showing a smaller proportion (6.5 percent) than in the United States (10.2 percent) (exhibit 2). In San Francisco, the 2013 proportion was a slight increase from the previous year (5.5 percent).

Other Opiates and Prescription Drugs

There were slightly more individuals in treatment for nonprescribed opiates/opioids in FY 2012–2013 than in FY 2011–2012 (exhibit 5). The majority of these clients were male, White, and age 25–44. Various opiate, sedative hypnotic, and stimulant pharmaceuticals were frequently prescribed throughout the five bay area counties, and they appeared with increasing frequency in reports from drug items seized and analyzed by NFLIS laboratories. When these drugs were combined, they accounted for 9.1 percent of total reports (exhibit 2). Individual prescription drugs ranking in the top 10 NFLIS reports for San Francisco among items seized and analyzed in 2013 included hydrocodone (ranked 5th at 3.5 percent), oxycodone (ranked 6th at 2.7 percent), methadone (ranked 7th at 1.1 percent), morphine (ranked 8th at 1.0 percent), and alprazolam (ranked 10th at 0.8 percent). Information on the top 50 prescribed drugs recorded in CURES, California's prescription drug monitoring system, for each bay area county was available for 2011–2013 for this report. CURES data showed relatively stable numbers of prescriptions between 2012 and 2013 for categories of sedative hypnotics, stimulants, oxycodone, codeine, and hydromorphone, while hydrocodone prescriptions decreased (by *n*=36,861 prescriptions) (exhibit 1). However, hydrocodone still ranked as the most frequently prescribed medication in the bay area, with more than 1.6 million prescriptions in 2013. The opiate overdose reversal medication naloxone was made available to 791 newly trained individuals; 836 refill requests were fulfilled; and 274 reversals were reported by the DOPE program in San Francisco in 2013, maintaining higher levels established in 2012 for reversals and showing a substantial increase in training and refills (exhibit 3).

Other Drugs

The category of "club drugs" has experienced a continued decline in indictors in San Francisco, with various prescription drugs exceeding this category in the indicators. While MDMA (3,4-methylene-dioxymethamphetamine) ranked ninth among NFLIS reports from drug items seized (representing 1.0 percent of samples identified, tied with morphine) in San Francisco, oxycodone, hydrocodone, and methadone were identified more frequently than MDMA (exhibit 2).

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

AIDS diagnoses and AIDS-related deaths continue to decline, while individuals living with AIDS increased (exhibit 6). A total of 18 percent of AIDS cases in San Francisco were associated with drug-related transmission categories, as of December 2013.

MAJOR TRENDS

Increases in Opiates and Prescription Opioids

Various heroin and prescription opioid indicators, including treatment admission and NFLIS data, showed sustained increases.

Methamphetamine and Cocaine on Different Trajectories

While cocaine treatment admission and NFLIS indicators continued to decline, methamphetamine indicators continued to rise. If the current trends continue, these stimulants may soon reverse their respective rankings in northern California.

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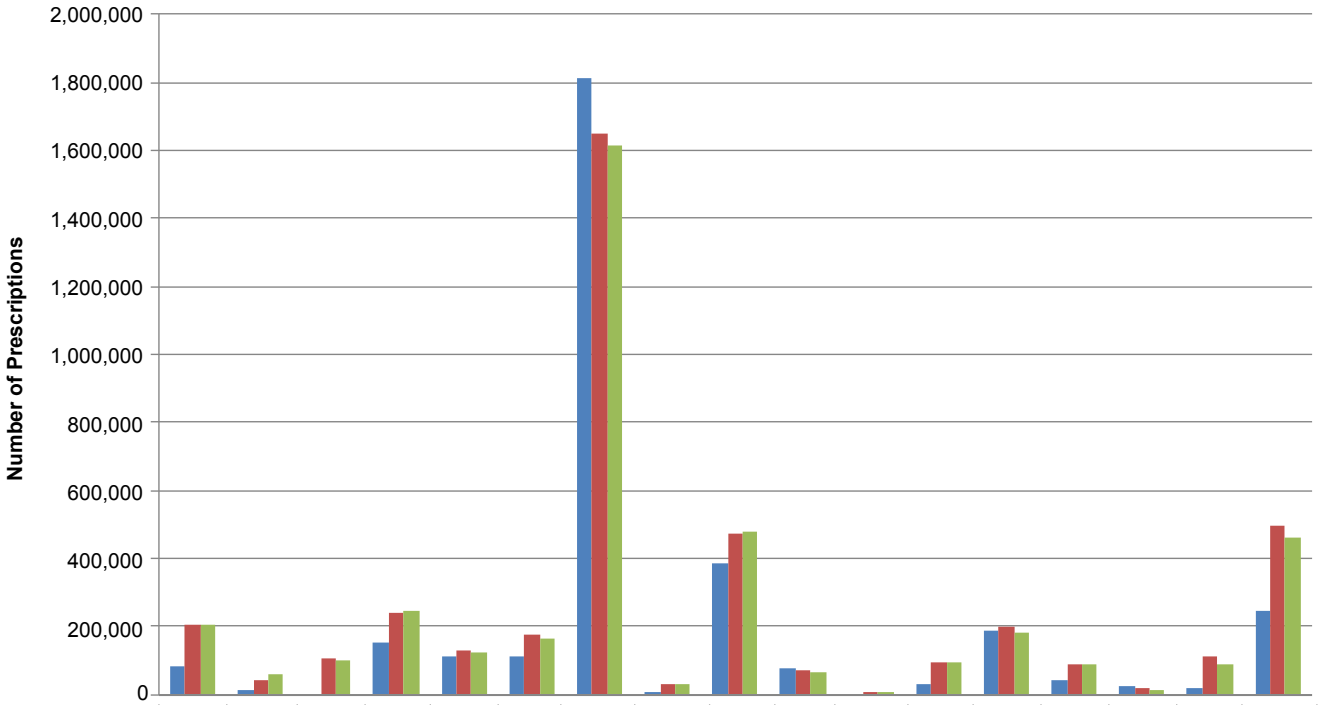
Exhibit 1. Number of Prescriptions for Selected Prescription Medications, Five San Francisco Bay Area Counties:[1] 2011–2013



	Alprazolam	Amphetamine	Carisoprodol	Clonazepam	Codeine	Diazepam	Hydrocodone	Hydromorphone	Lorazepam	Methadone	Methylphenidate	Morphine	Oxycodone/APAP	Oxycodone IR	Oxycodone ER	Temazepam	Zolpidem
2011	81,698	12,287	—	150,046	113,605	113,213	1,814,215	9,423	387,736	75,037	—	30,394	189,932	41,672	24,564	17,682	247,955
2012	203,670	41,585	107,470	240,432	131,883	174,878	1,650,833	32,773	472,264	70,716	6,109	94,900	199,484	86,501	18,513	111,475	496,852
2013	204,375	58,417	100,826	247,029	124,728	166,381	1,613,972	32,759	477,363	67,324	3,157	95,914	184,434	88,800	11,236	91,765	462,077

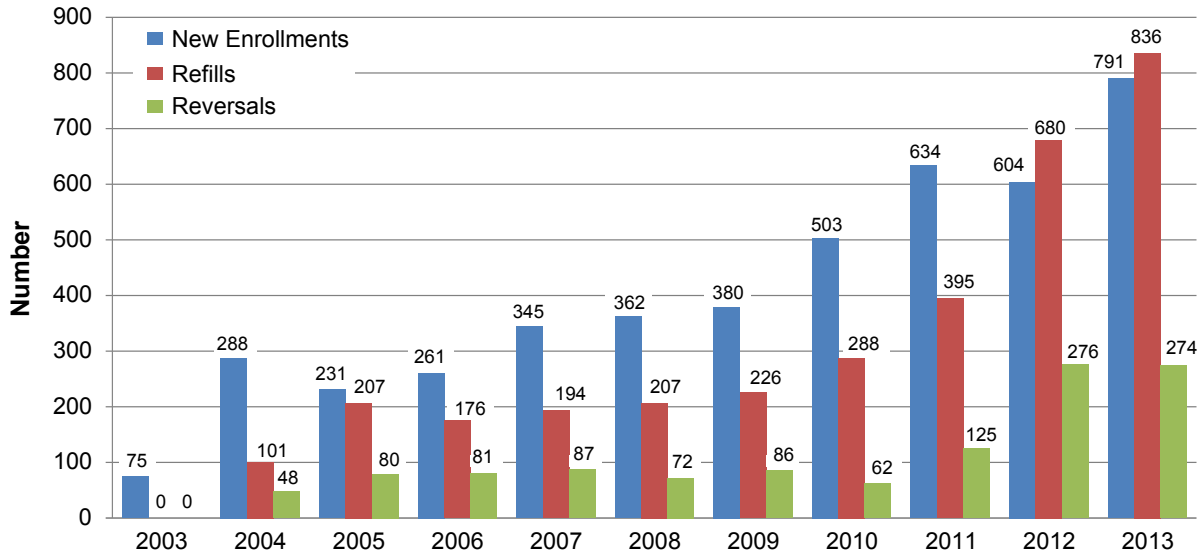
[1]Alameda, Contra Costa, Marin, San Francisco, and San Mateo Counties.
SOURCE: California Department of Justice, Law Enforcement Support Program, Bureau of Criminal Identification and Investigative Services, from the Controlled Substance Utilization Review and Evaluation System (CURES), California Prescription Drug Monitoring Program

Exhibit 2. Top 10 Most Frequently Identified Drugs Among Total Analyzed NFLIS Drug Reports, by Rank and Percentage, San Francisco MSA,[1] Compared With the United States: 2013

Drug	San Francisco Rank	United States Rank	San Francisco Percentage	United States Percentage
Methamphetamine	1	3	39.0	14.6
Marijuana	2	1	18.5	31.4
Cocaine	3	2	14.3	15.4
Heroin	4	4	6.5	10.2
Hydrocodone	5	5	3.5	3.1
Oxycodone	6	6	2.7	2.5
Methadone	7	—	1.1	—
Morphine	8	—	1.0	—
MDMA	9	—	1.0	—
Alprazolam	10	7	0.8	2.4
XLR-11	—	8	—-	1.3
Acetaminophen	—	9	—	1.2
Buprenorphine	—	10	—	0.8
Other/Unknown	—	—	11.4	16.9

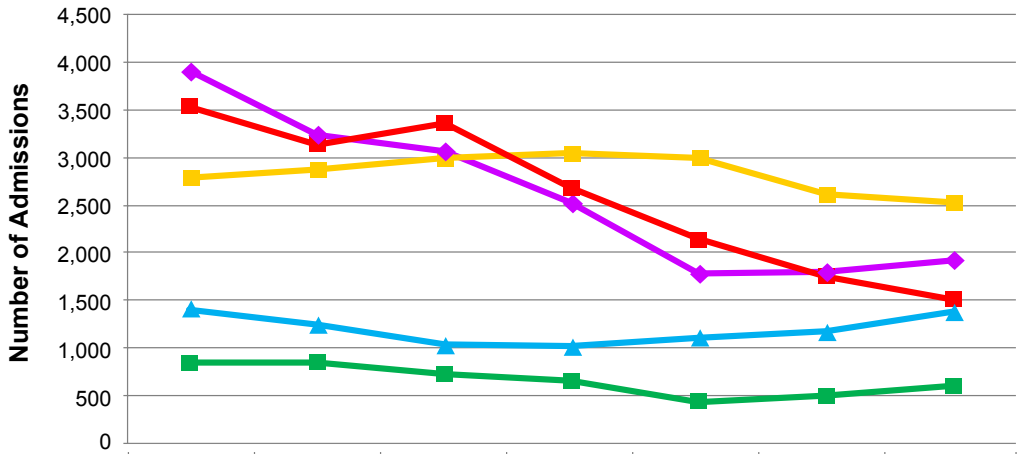
[1]The San Francisco MSA includes Alameda, Contra Costa, Marin, San Francisco, and San Mateo Counties.
SOURCE: NFLIS, DEA, May 9, 2014

Exhibit 3. Number of New Enrollments, Refills, and Reversals[1] in the San Francisco DOPE Project,[2] San Francisco: 2003–2013



[1]Reports of refills for naloxone, an opiate reversal medication, and overdose reversals through administering the medication.
[2]San Francisco Drug Overdose Prevention Education (DOPE) Project, a program of the Harm Reduction Coalition.
SOURCE: San Francisco Drug Overdose Prevention Education Project, Harm Reduction Coalition

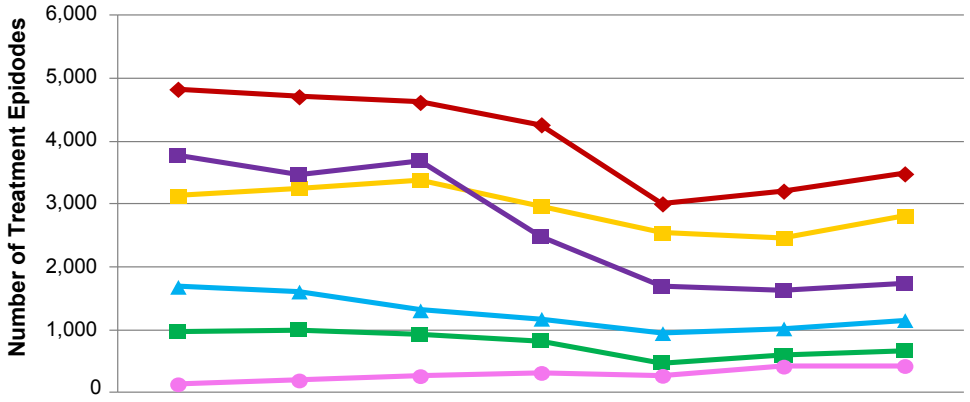
Exhibit 4. Number of Treatment Admissions[1] by Primary Drug Problem, San Francisco County: FY 2006–2007 Through FY 2012–2013



	FY 2006–2007	FY 2007–2008	FY 2008–2009	FY 2009–2010	FY 2010–2011	FY 2011–2012	FY 2012–2013
Heroin	3,905	3,242	3,067	2,521	1,781	1,798	1,925
Alcohol	2,790	2,878	2,995	3,040	2,999	2,617	2,531
Methamphetamine	1,393	1,247	1,031	1,015	1,113	1,170	1,380
Cocaine	3,539	3,142	3,364	2,684	2,137	1,752	1,510
Marijuana	839	851	727	651	437	492	594

[1]Admissions include clients admitted to treatment during a fiscal year.
SOURCE: Community Behavioral Health Services Division, San Francisco Department of Public Health

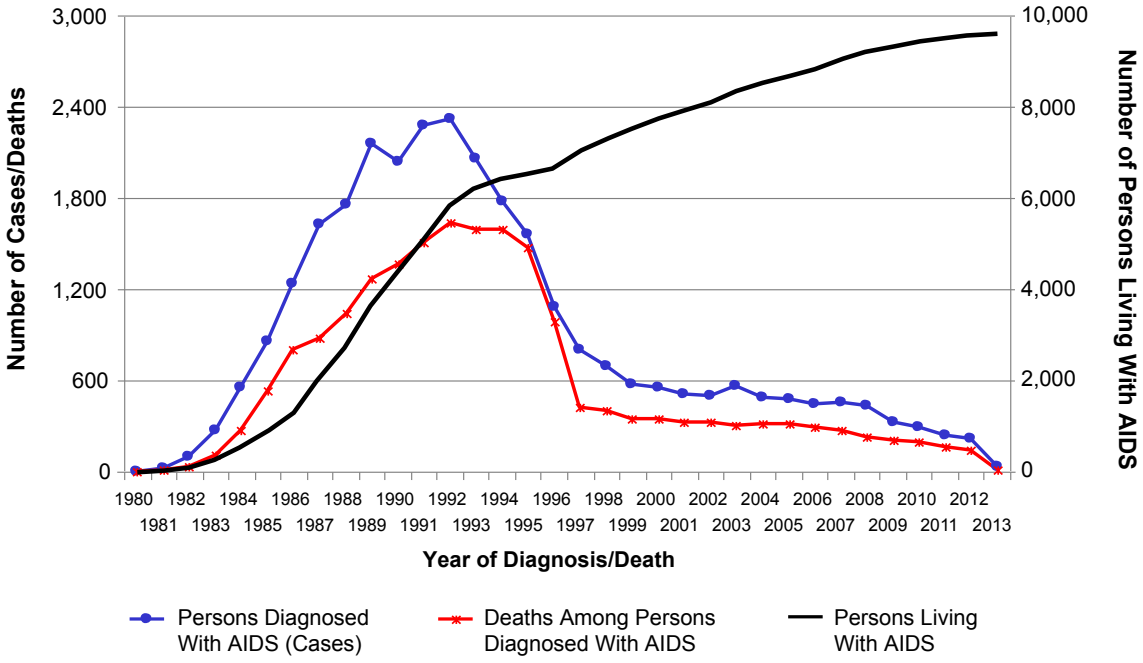
Exhibit 5. Number of Treatment Service Episodes[1] by Primary Drug Problem, San Francisco County: FY 2006–2007 Through FY 2012–2013



	FY 2006–2007	FY 2007–2008	FY 2008–2009	FY 2009–2010	FY 2010–2011	FY 2011–2012	FY 2012–2013
Heroin	4,824	4,705	4,615	4,259	3,002	3,204	3,479
Alcohol	3,128	3,251	3,387	2,970	2,538	2,458	2,815
Methamphetamine	1,683	1,608	1,309	1,175	947	1,022	1,154
Cocaine	3,776	3,470	3,690	2,487	1,681	1,620	1,735
Marijuana	967	998	925	823	469	587	668
Nonprescription Pills	133	194	263	314	268	414	424

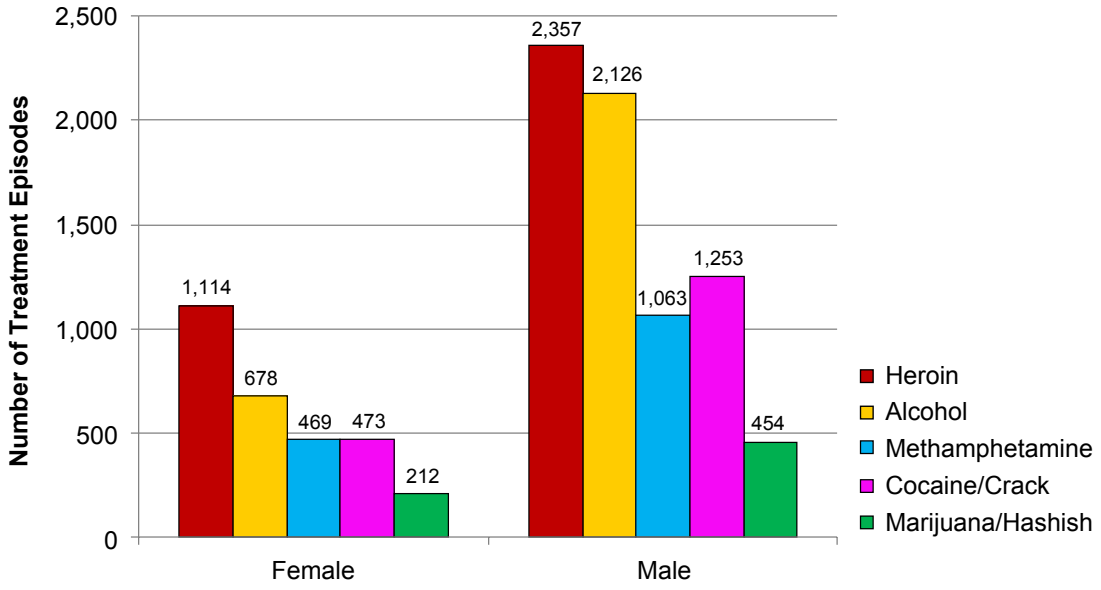
[1]Episodes include clients admitted to treatment in a previous fiscal year who are still receiving services in the current fiscal year.
SOURCE: Community Behavioral Health Services Division, San Francisco Department of Public Health

Exhibit 6. AIDS Incidence, Mortality, and Prevalence, by Number, San Francisco: 1980–2013[1]



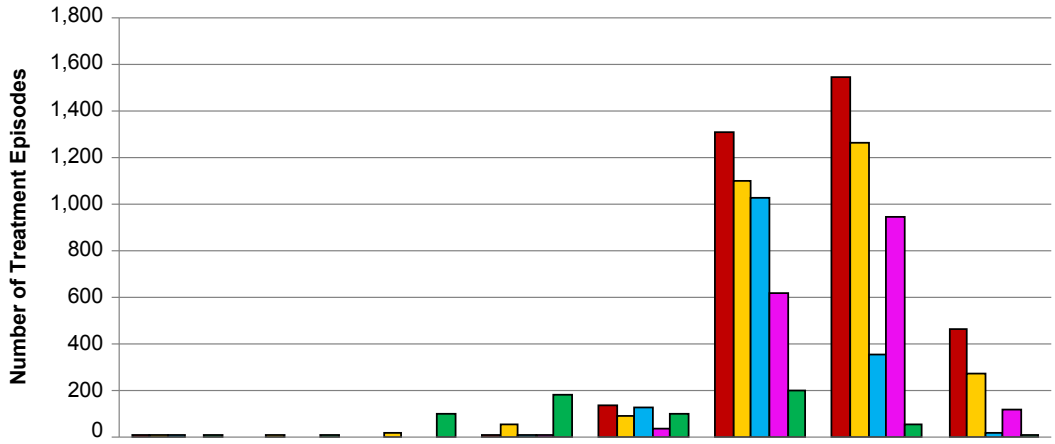
[1]Reporting for recent years is incomplete.
SOURCE: HIV Semiannual Surveillance Report, San Francisco Department of Public Health, HIV Cases Reported Through December 2013

Exhibit 7. Number of Treatment Episodes[1] by Primary Drugs at Episode Admission for Selected Substances, by Gender, San Francisco County: FY 2012–2013



[1]Episodes include clients admitted to treatment in a previous fiscal year who are still receiving services in the current fiscal year.
SOURCE: Community Behavioral Health Services Division, San Francisco Department of Public Health

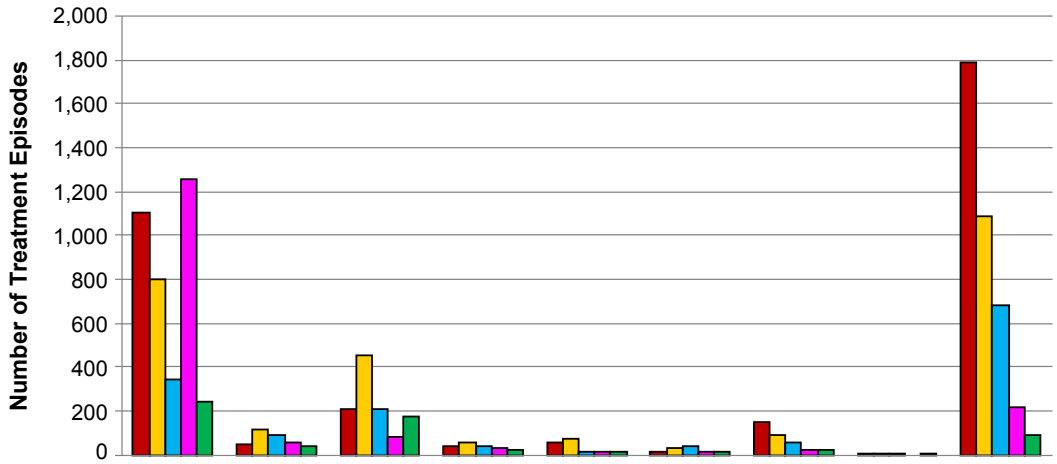
Exhibit 8. Number of Primary Treatment Episodes[1] by Primary Drug at Episode Admission for Selected Substances, by Age Group, San Francisco County: FY 2012–2013



	Younger than 5	5–12	13–15	16–18	19–24	25–44	45–60	60 and Older
Heroin	2	—	—	4	139	1,312	1,551	470
Alcohol	1	1	26	59	91	1,100	1,264	273
Methamphetamine	1	—	—	8	128	1,029	358	20
Cocaine/Crack	—	—	—	3	36	624	948	123
Marijuana/Hashish	1	11	104	183	100	200	60	8

[1]Episodes include clients admitted to treatment in a previous fiscal year who are still receiving services in the current fiscal year.
SOURCE: Community Behavioral Health Services Division, San Francisco Department of Public Health

Exhibit 9. Number of Treatment Episodes[1] by Primary Drug of Abuse at Episode Admission for Selected Substances, by Race, San Francisco County: FY 2012–2013



	African-American/ Black	Asian	Latino(a)	Multiethnic	Native American	Native Hawaiian or Other Pacific Islander	Other	Unknown	White
Heroin	1,109	50	205	44	57	15	148	8	1,794
Alcohol	804	113	452	54	77	35	93	4	1,092
Methamphetamine	346	91	207	44	17	44	60	1	679
Cocaine/Crack	1,261	55	86	34	15	13	24	—	220
Marijuana/Hashish	241	39	179	27	11	14	25	2	94

[1]Episodes include clients admitted to treatment in a previous fiscal year who are still receiving services in the current fiscal year.
SOURCE: Community Behavioral Health Services Division, San Francisco Department of Public Health